A NEW NAME COMBINATION IN LEWISIA (PORTULACACEAE)

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ABSTRACT

The nomenclature and possible relationships of Lewisia pygmaea, L. nevadensis and L. glandulosa are discussed.

KEY WORDS: Lewisia, Portulacaceae, systematics.

Study of the Lewisia pygmaea complex has resulted in the following reflections: Calandrinia pygmaea Gray and Calandrinia nevadensis Gray were published in 1873, with the former having page priority. These were subsequently placed in Lewisia by Robinson in 1897. Oreobroma glandulosum Rydberg was published in 1932, and subsequently placed in Lewisia as a subspecies of L. pygmaea by Ferris in 1944. Lewisia nevadensis was relegated to the status of subspecies under L. pygmaea by Fosberg in 1942. I believe that the chronological order in which these three species were published has had an unfortunate effect on their subsequent taxonomic treatment.

Since it is evident to anyone who has worked on the group that Lewisia pygmaea blends on the one hand with L. nevadensis and on the other with Oreobroma glandulosum, the tendency has been to make the two extremes infraspecific taxa under L. pygmaea, the tacit assumption being that the variable and widespread L. pygmaea is the parent of the other two taxa. It seems clear to me, however, that this is the wrong approach. Lewisia nevadensis and O. glandulosum are completely distinct and clearly different from each other. It is only the existence of L. pygmaea that blurs that distinction.

There are two possible taxonomic solutions to this problem: 1) to lump all of these plants under one name (i.e. Lewisia pygmaea) or 2) to recognize three species, two of which can be clearly defined, at least in relation to each other, the third, however, (L. pygmaea) being intermediate, widespread, variable and ill defined.

Contrary to the tacit assumption mentioned above, my theory is that Lewisia pygmaea is of hybrid origin, and is continually undergoing introgression from the other two species, although much further work would be needed, particularly with chromosomes and artificial crossing, to verify this. As a result of this supposition, however, the following nomenclature becomes appropriate:

- Lewisia pygmaea (A. Gray) B.L. Robinson, in A. Gray, Syn. Fl. N. Amer. 1(1):268. Cambridge, 1897. BASIONYM: Calandrinia pygmaea A. Gray, Proc. Amer. Acad. Arts 8:623. 1873.
- Lewisia nevadensis (A. Gray) B.L. Robinson, in A. Gray, Syn. Fl. N. Amer. 1(1):268. Cambridge 1897. BASIONYM: Calandrinia nevadensis A. Gray, Proc. Amer. Acad. Arts 8:623. 1873. Oreobroma nevadensis (A. Gray) Howell, Erythea 1:33. 1893. Lewisia pygmaea (A. Gray) B.L. Robins. var. nevadensis (A. Gray) Fosberg, Amer. Midl. Naturalist 27:256. 1942.
- Lewisia glandulosa (Rydb.) Dempster, comb. nov. BASIONYM: Oreobroma glandulosa Rydb., in North American Flora part 4:325. New York, 1932. Lewisia pygmaea (A. Gray) B.L. Robins. subsp. glandulosa (Rydb.) Ferris, in Abrams Illustrated Flora of the Pacific States II:134. Stanford, 1944.

Morphological discussion and key to species will appear in the forthcoming revision of W.L. Jepson's Manual (Jepson, Man. Fl. Pls. Calif. [1925]) to be published in 1993.